

AMENDMENTS TO THE CLAIMS

IN THE CLAIMS:

Claims 1-7 (Canceled).

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8. (Currently Amended) A method for inspecting an integrated circuit, the method comprising: ~~a determination of a current in a signal line in the circuit,~~  
characterised in that

measuring a voltage over a segment of ~~the~~ a signal line; and is measured and  
that the determination of the current is carried out

determining a signal current flowing through the signal line on the basis of the  
voltage and the resistance of the segment of the signal line,

wherein inspection of the integrated circuit is performed on the basis of the  
determined signal current.

[ Claims 9-12 (Canceled). ]

13. (Currently Amended) An integrated circuit comprising:  
a signal line; and  
a current measuring device for ~~measuring~~ determining a current in a the signal  
line,

wherein in the circuit, characterised in that the current measuring device

comprises a voltage measuring device connected across a segment of the signal line,  
said voltage measuring device being adapted to measure ~~for measuring~~ a voltage over  
 a segment of the signal line, and

wherein the current measuring device determines the current on the basis of the  
measured voltage and an inherent resistance of the segment.

14. (New) The method of claim 8, wherein measuring the voltage comprises:  
 connecting first and second inputs of a differential pair of transistors to first  
 and second sides, respectively, of the segment, and making a first measurement;  
 reversing the connection of the differential pair of transistors to the segment by  
 connecting the first and second inputs of the differential pair of transistors to the  
 second and first sides of the segment, respectively, and making a second measurement;  
 and

combining the first and second measurements to derive a result for use as the  
 measured voltage over the segment.

15. (New) The integrated circuit of claim 13, wherein the voltage measurement  
 device includes:

a differential pair of transistors having respective first and second inputs; and  
~~means for toggling connections between first and second sides of the segment~~  
 and the first and second inputs of the differential pair of transistors.

16. (New) The integrated circuit of claim 13, further comprising <sup>?</sup> means for  
successively connecting the voltage measuring device to the segment of the signal line  
and to a segment of a second signal line of the integrated circuit. }

17. (New) The integrated circuit of claim 13, wherein the signal line extends  
between first and second sub-circuits on a semiconductor substrate.

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